

[0026] What is claimed is:

1. An apparatus comprising:

a combiner having a first capacitor-inductor-capacitor impedance converter operably coupled to a second capacitor-inductor-capacitor impedance converter to combine first and second signals of first and second outphasing power amplifiers, respectively, and to provide a matched output impedance to a load.

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2. The apparatus of claim 1, wherein the first capacitor-inductor-capacitor impedance converter comprises a first capacitor, a first inductor and a shared capacitor, and wherein the second capacitor-inductor-capacitor impedance converter comprises a second capacitor, a second inductor and said shared capacitor.
3. The apparatus of claim 2, wherein the shared capacitor combines the first and second signals of the first and second outphasing power amplifiers, respectively.
4. The apparatus of claim 1, wherein the capacitance of the first capacitor is different from the capacitance of the shared capacitor.
5. The apparatus of claim 1, wherein the first and second outphasing power amplifiers comprise transistors.
6. The apparatus of claim 5, wherein the transistors are bipolar transistors.
7. The apparatus of claim 1, further comprising a filter to filter out a second harmonic of the first and second signals.

8. An apparatus comprising:

a dipole antenna operably coupled to an outphasing transmitter with reactive termination having a combiner that includes a first capacitor-indicator-capacitor impedance converter operably coupled to a second capacitor-inductor-capacitor impedance converter to combine first and second signals of first and second outphasing power amplifiers, respectively, and to provide a matched output impedance to the dipole antenna.

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9. The apparatus of claim 8, wherein the first capacitor-inductor-capacitor impedance converter comprises a first capacitor, a first inductor and a shared capacitor, and wherein the second capacitor-inductor-capacitor impedance converter comprises a second capacitor, a second inductor and said shared capacitor.

10. The apparatus of claim 9, wherein the shared capacitor combines the first and second signals of the first and second outphasing power amplifiers, respectively.

11. The apparatus of claim 8, wherein the capacitance of the first capacitor is different from the capacitance of the shared capacitor.

12. The apparatus of claim 8, wherein the first and second outphasing power amplifiers comprise transistors.

13. The apparatus of claim 12, wherein the transistors are bipolar transistors.

14. The apparatus of claim 8, further comprising a filter to filter out a second harmonic of first and second signals.

15. A method comprising:

providing impedance matching between a combination of first and second power amplifiers and a desired load by assigning first and second capacitance values to first and second capacitors, respectively, associated with said combination.

16. The method of claim 15, comprising assigning different capacitance values to the first and second capacitors.

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17. The method of claim 15 comprising filtering out a second harmonic of first and second signals provided by the first and second power amplifiers, respectively.

18. A wireless communication system comprising:
  - a mobile station having an outphasing transmitter with reactive termination that include a combiner having a first capacitor- inductor-capacitor impedance converter operably coupled to a second capacitor-inductor-capacitor impedance converter to combine first and second signals of first and second outphasing power amplifiers, respectively, and to provide a matched output impedance to an antenna.
19. The wireless communication system of claim 18, wherein the first capacitor- inductor-capacitor impedance converter comprises a first capacitor, a first inductor and a shared capacitor, and wherein the second capacitor-inductor-capacitor impedance converter comprises a second capacitor, a second inductor and said shared capacitor.
20. The wireless communication system of claim 19, wherein the shared capacitor combines the first and second signals of the first and second outphasing power amplifiers, respectively.
21. The wireless communication system of claim 18, wherein the first capacitor is different from the capacitance of the shared capacitor.
22. The wireless communication system of claim 21, wherein the first and second outphasing power amplifiers comprise transistors.

23. A wireless communication system comprising:

a base station having an outphasing transmitter with reactive termination that include a combiner having a first capacitor- inductor-capacitor impedance converter operably coupled to a second capacitor-inductor-capacitor impedance converter to combine first and second signals of first and second outphasing power amplifiers, respectively, and to provide a matched output impedance to an antenna.

24. The wireless communication system of claim 23, wherein the first

capacitor-inductor-capacitor impedance converter comprises a first capacitor, a first inductor and a shared capacitor, and wherein the second capacitor-inductor-capacitor impedance converter comprises a second capacitor, a second inductor and said shared capacitor.

25. The wireless communication system of claim 24, the shared capacitor combines the first and second signals of the first and second outphasing power amplifiers, respectively.

26. The wireless communication system of claim 23, wherein the first capacitor is different from the capacitance of the shared capacitor.